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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,041	09/22/2003	Andrei Colibaba-Evulet	132297-1	7859

7590 02/10/2005

Patrick K. Patnode  
General Electric Company  
GRC Patent Docket Rm 4A59  
P.O. Box 8, Bldg. K-1  
Schenectady, NY 12301

EXAMINER

GARTENBERG, EHUD

ART UNIT PAPER NUMBER

3746

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/667,041

Applicant(s)

COLIBABA-EVULET ET AL.

Examiner

Ehud Gartenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/22/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11, drawn to a reverse flow combustor comprising independent primary and secondary fuel supply assemblies, classified in class 60, subclass 734.
  - II. Claims 12-18, drawn to a reverse flow combustor comprising air cooling holes for a heat shield, classified in class 60, subclass 752.
  - III. Claims 19-25, drawn to a process for reducing NO<sub>x</sub> in a gas turbine employing a can-type combustor, classified in class 60, subclass 776.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as use with a combustor having only one fuel supply assembly; also invention I as claimed does not for its practice the heat shield claimed for invention II. See MPEP § 806.05(d).
3. Inventions I and II separately and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially

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different process of using that product (MPEP § 806.05(h)). In the instant case the method does not require for its practice neither the annularly tapered wall of the shroud claimed in invention I, claim 1, nor the heat shield claimed in invention II, claim 12.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, and the search required for either of Group I and Group II is not required for Group III, restriction for examination purposes as indicated is proper. Applicant is therefore required to elect for examination at this time one invention, from either Group I, or Group II, or Group III.

5. As a courtesy to Applicant, the Examiner brings to his attention the following apparent deficiencies in the specification:

A) In Figure 10 and in particular in Figure 4, the heat shield 136 is shown as having a radially outward wall and a radially inward (numeral 136 has to lines/arrows pointing to two radially distinct surfaces). It is not clear what is the radially inward wall, because the specification on p. 10, l. 16 teaches the shield as being "cup shaped". Also, it is not clear how air blown through holes 142 and 220 both "directly impinge the backside of heat shield 136" as disclosed on p. 10, ll. 26-27. Either the axially running / radially outward wall facing 142 is "the backside", or the radial wall facing 220 is "the backside", but not simultaneously both. Maybe "outer surface" would better define the back surface of the shield, as opposed to an inner surface that is facing the combustion space.

B) On p. 13, ll. 9, 15, 16, 22, 25, and on p. 14, l. 14, element 216 is disclosed as being either a ferrule and a secondary fuel nozzle. Applicant is required to proofread the application and correct these and similar apparent errors.

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C) In Fig. 6 of the formal drawings, Applicant may want to identify the dome plate by its number 134.

The correction of these apparent deficiencies will not be held in abeyance. The Examiner will accept any explanation or amendments that will clarify issues raised above.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. A telephone call was made to Peter Hagerty on 2/8/2005 to request an oral election to the above restriction requirement, but did not result in an election being made. The Examiner took this opportunity to discuss in detail the minor informalities detailed above with the Attorney.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehud Gartenberg whose telephone number is 571 272 4828. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571 272 4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ehud Gartenberg  
Primary Examiner  
Art Unit 3746

02082005